WO 2005/096419 PCT/RU2005/000151

6

## **CLAIMS**

1. An electrode of an alkaline fuel cell, said electrode comprising an insulating frame having ports for feeding and discharging reagents, a mesh current collector embedded in the frame and having lead-outs extending beyond the frame, an active and a barrier layers sequentially applied onto the mesh current collector, characterized in that sites of the embedment of the current collector and the lead-outs in the insulating frame and a periphery of the current collector along an inner edge of the insulating frame are provided with a sealing layer.

5

10

15

20

25

- 2. The electrode according to claim 1, characterized in that the sealing layer is made of an electrolyte non-wettable substance.
- 3. The electrode according to claim 2, characterized in that the sealing layer is made of fluoroplastic.
- 4. A method for producing an electrode of an alkaline fuel cell, said method including producing a mesh current collector having lead-outs, sequentially applying an active and a barrier layers onto the mesh current collector, embedding the current collector having the lead-outs into an insulating frame, characterized in that, before the application of the active and barrier layers onto the current collector, edges of the current collector and the lead-outs in sites of the embedment into the insulating frame are impregnated with a lacquer solution and, after the collector has been embedded into the insulating frame, a periphery of the collector along an inner edge of the insulating frame is impregnated with the lacquer solution.
- 5. The method according to claim 4, characterized in that a solvent wetting the mesh current collector is used as a solvent for the lacquer, and a substance which forms a continuous, electrolyte non-wettable film after the solvent evaporation is used as the lacquer.